

incremental cost of HUF 143,897 over standard care. This additional cost of care resulted in an incremental 0.05 QALY gain over the 6 months period. The incremental cost effectiveness ratio was 2,863,913 HUF/QALY for the pimecrolimus therapy. **CONCLUSIONS:** Pimecrolimus is more cost-effective than many other health care interventions currently reimbursed by the Hungarian National Health Fund.

**PSN4****COST-EFFECTIVENESS MODEL OF ALDARA™ (IMIQUMOD) CREAM, 5% IN SUPERFICIAL BASAL CELL CARCINOMA IN THE NETHERLANDS**De Cock E<sup>1</sup>, Nuijten MJ<sup>2</sup>, Hollestein A<sup>3</sup>, Hamel-Gariépy L<sup>4</sup><sup>1</sup>The Medtap Institute, London, UK; <sup>2</sup>Erasmus University, Rotterdam, The Netherlands; <sup>3</sup>3M Pharma, Zoeterwoude, The Netherlands;<sup>4</sup>Laboratoires 3M Santé, Cergy-Pontoise, France

**OBJECTIVES:** To evaluate short-term and long-term cost-effectiveness of imiquimod versus surgery in the treatment of superficial basal cell carcinoma in The Netherlands. **METHODS:** A decision analytic model adopting a societal perspective was developed and compared cost and outcomes of imiquimod vs. surgery. The short-term (18 weeks) effectiveness outcome was histological clearance, with sustained clearance the outcome at 3 years. Direct costs included costs of excision and Moh's surgery, drugs, adverse events, follow-up and transportation. Indirect costs comprise working hours lost due to dermatologist and surgery visits. Data were derived from clinical trials (Imiquimod histological clearance and recurrence rates), Delphi panel (resource utilisation) and published literature (surgery response and recurrence rates). Cost data were taken from official costing guide and tariff lists. Two scenarios were used for calculating surgery costs: 1) micro-costing (using average time and supplies obtained from the Delphi panel), and 2) a Dutch study on the costs of surgery. Long-term costs were discounted at 4%. **RESULTS:** Compared with surgery, short-term savings with imiquimod were €79 and €97 per patient for scenarios 1 and 2 respectively [total costs: €585 vs. €663 and €590 vs. €687]. Histological clearance of 82% for imiquimod and 91% for surgery made imiquimod a cost-effective treatment option. Long-term costs with imiquimod were an extra €148 and €133 for scenarios 1 and 2 [total costs: €1471 vs. €1322 and €1479 vs. €1346], while sustained clearance with imiquimod was 87% vs. 96% for surgery. The model showed moderate sensitivity to changes in response and recurrence rates, response to treatment, and numbers of working days lost. **CONCLUSION:** While imiquimod is cost-effective in the short-term, long-term cost-effectiveness should be judged with prudence because of the uncertainty surrounding long-term recurrence data. Non-tangible benefits, such as patient preference for avoiding surgery and patient convenience were not quantified in the model either.

**PSN5****PSN6****COST-EFFECTIVENESS OF BRIVUDINE COMPARED TO ACICLOVIR FOR THE TREATMENT OF HERPES ZOSTER IN GERMANY**Kaltwasser MT<sup>1</sup>, Nannicini A<sup>2</sup>, Tofani L<sup>2</sup><sup>1</sup>Berlin-Chemie (Menarini Group), Berlin, Germany; <sup>2</sup>A. Menarini, Florence, Italy

**OBJECTIVES:** To examine the cost-effectiveness (CE) of brivudine over aciclovir in the treatment of herpes zoster in Germany. **METHODS:** This CE analysis used effectiveness data from a double-blind RCT comparing brivudine (125 mg p.o. once daily) with aciclovir (800 mg p.o. five times daily). Treatment with brivudine showed a 25% reduction in postherpetic neuralgia (PHN). Based on the IMS prescription index, the 2004 incidence of herpes zoster in Germany was 348,000 cases, with 15.74% consecutive cases of PHN under brivudine and 21% PHN cases under aciclovir. Cost data were obtained from public price lists. One therapy cycle with brivudine or aciclovir costs €95.67 and €32.83 respectively; analgesics for PHN cost an average €1500 annually. The study was conducted considering direct costs only. A sensitivity analysis accounted for varying costs for treating PHN and age-dependent PHN incidences. **RESULTS:** A total of 54,775 PHN cases under brivudine and 73,080 cases under aciclovir were calculated, producing total annual treatment costs of €115,455,660 and €121,044,840. Treatment with brivudine saved costs of €305.34 per PHN case avoided. The sensitivity analysis considered that 60% of herpes zoster patients are 60 years or older (IMS Disease Analyzer 2002), resulting in different numbers of PHN cases depending on age and antiviral therapy. ICERs of brivudine ranged for the older age group between €694.66 (PHN therapy cost: €500) and –€1805.34 (PHN therapy cost: €3000). Corresponding values for the younger age group were €1827.66 and –€672.34. Both antiviral therapies produced equal annual total therapy costs if PHN therapy amounted to €1200. **CONCLUSIONS:** Although three times more expensive, brivudine proved cost effective over aciclovir, producing savings if PHN therapy costs were equal to or higher than €1200. Since effective analgesic therapy would cost an average €3000 annually, brivudine may be recommended as first-choice treatment because of its cost-saving potential and convenient once-daily dosage.

**PSN7****EPIDEMIOLOGY AND MANAGEMENT OF EXTERNAL GENITAL WARTS (EGW) IN FRANCE**Vainchtock A<sup>1</sup>, Aractingi S<sup>2</sup>, Monsonogo J<sup>3</sup>, Sultan S<sup>4</sup>, Vernay C<sup>5</sup>, Duru G<sup>6</sup>, Decuyper L<sup>7</sup>, Flahault A<sup>8</sup>, Lamarsalle L<sup>1</sup>, Hamel-Gariépy L<sup>7</sup><sup>1</sup>IMS Health—GYD Institut, Lyon, France; <sup>2</sup>Hôpital Tenon, Paris, France; <sup>3</sup>Institut Alfred Fournier, Paris, France; <sup>4</sup>Hôpital des Diaconesses, Paris, France; <sup>5</sup>DAV—Conseil Général des Bouches du Rhône, Marseilles, France; <sup>6</sup>Université Claude Bernard Lyon I, Lyon, France; <sup>7</sup>Laboratoires 3M Santé, Cergy-Pontoise, France; <sup>8</sup>INSERM—Unité 707, Paris, France

**OBJECTIVES:** To estimate the annual number and frequency of medical consultations for EGW in dermatology, gynecology, proctology and in Sexually Transmitted Disease Clinics (STDC) in France. **METHODS:** This is an observational study with patients recruited prospectively from representative physicians samples. Data related to the management of EGW was retrieved for all patients suffering from EGW and willing to take part in the study, during one 2-week period in June 2004. **RESULTS:** The patients (n = 308) were recruited by the physician sample that included 198 gynecologists, 102 dermatologists, 50 proctologists and 122 physicians working in 51 STDCs. The annual number of consultations for EGW is estimated at 423,751 (36% for dermatologists, 53% for gynecologists, 6% for proctologists, 5% in STDC). The annual number of visits for a new episode of EGW amounted to 160,247, representing 38% of the consultations. The annual frequency of consultation is 1.1 to 1.4% for dermatologists and gynecologists and 4.4% to 5.1% for proctologists. Almost half of the patients (43%) were seeking care because of an EGW recurrence. EGW are treated using pharmacological treatments and in-office procedures (electrocoagulation, cryotherapy, surgery, laser). Imiquimod treatment is used as first-line therapy is 40% of patients with a first episode of EGW and in 38% of patients presenting for an EGW recurrence. **CONCLUSION:** Gynecologists are the most consulted specialists for EGW and proctologists have the highest annual frequency of consultation. Various treatments are used to manage EGW patients.

## PSN8

#### EXAMINATION OF ADHERENCE TO PHARMACOTHERAPY TREATMENT GUIDELINES IN PATIENTS WITH PSORIASIS IN THE UNITED STATES

Kulkarni A<sup>1</sup>, Horn E<sup>2</sup>, Balkrishnan R<sup>1</sup>, Feldman S<sup>3</sup>

<sup>1</sup>Ohio State University College of Pharmacy, Columbus, OH, USA;

<sup>2</sup>National Psoriasis Foundation, Portland, OR, USA; <sup>3</sup>Wake Forest University School of Medicine, Winston Salem, NC, USA

**OBJECTIVE:** The American Academy of Dermatology guidelines provide a standard for appropriate pharmacological therapy in psoriasis treatment. This survey study examined if patients with severe psoriasis were on appropriate medications. **METHODS:** A survey for this study was conducted by the National Psoriasis Foundation between November and December 2004. A total of 400 interviews (telephone n = 188 and online n = 212) were held with psoriasis and psoriatic arthritis respondents. The respondents were asked questions regarding their psoriasis. Some of these pertained to the type of medication participants were currently using. Respondents chosen from a random sample were screened for a mix of gender and age. Severity was categorized according to self-reported body surface area involvement. Descriptive data were generated to determine demographic characteristics of study population and prescription patterns. **RESULTS:** Approximately 55% of the population had severe psoriasis. Almost 50% of the population was on topical therapy while 32% of the study sample was using systemic medications for their psoriasis. About 19% of the study population indicated that they were currently not on any treatment. Almost 54% of these were suffering from severe psoriasis. A total of 157 patients with severe psoriasis were on some form of topical therapy, however, only 63 of these were on concurrent recommended systemic therapy. As much as 60% of the patients with severe psoriasis were on some form of topical therapy alone to treat their psoriasis. **CONCLUSIONS:** Even with such easily accessible guidelines in place, this study finds that there are several people suffering from severe psoriasis that are not on the recommended therapy in the United States. There remains a need to inform both the patients and physicians about

appropriate pharmacotherapy to avoid further worsening of health status of the patients involved.

## PSN9

#### PATTERNS OF TOPICAL ACNE PRESCRIPTION MEDICATION USE: ANALYSIS OF A LARGE-SCALE RETROSPECTIVE CLAIMS DATABASE

Hankin C<sup>1</sup>, Patel BV<sup>2</sup>, Leslie S<sup>2</sup>, Gyang E<sup>1</sup>

<sup>1</sup>BioMedEcon, LLC, Moss Beach, CA, USA; <sup>2</sup>MedImpact Healthcare Systems, Inc, San Diego, CA, USA

**OBJECTIVES:** To examine one-year patterns of topical acne prescription medication use among enrollees of a US national pharmacy benefits management system. **METHODS:** We conducted a one-year, retrospective, longitudinal cohort study of pharmacy claims (i.e., prescription fills) for topical acne prescription medications among continuously enrolled patients with at least one claim for: retinoids (tazarotene, retinoic acid) or antimicrobials (erythromycin, erythromycin with benzoyl peroxide, clindamycin, clindamycin with benzoyl peroxide, azelaic acid, sulfacetamide, benzoyl peroxide). We examined patient characteristics (age, gender), proportion of patients using topical medications as monotherapy or in combination with other targeted medications, and average number of targeted medication claims per patient. **RESULTS:** Among 76,407 identified patients, 11.4% were under age 14, 35.3% age 14 to 17 years, 19.1% age 18 to 24 years, 9.2% age 25 to 31 years, 8.3% age 32 to 38 years, 6.9% age 39 to 45 years, and 9.8% over 45 years. Sixty-four percent were female. Three quarters (74%) of patients used only one targeted topical acne medication (i.e., monotherapy) throughout the index year. Among patients receiving monotherapy, total average number of claims was 2.3 (erythromycin, 1.7 claims; erythromycin with benzoyl peroxide, 2.4; clindamycin 2.8; clindamycin with benzoyl peroxide 2.7; azelaic acid, 2.3; benzoyl peroxide, 2.8; sulfacetamide, 1.9; retinoids, 2.0). Among patients receiving combined therapy, total average number of antimicrobial claims was 2.2 and total number of retinoid claims was also 2.2. Number of claims, types of topical acne prescription medications, and other patterns of use did not significantly differ by age or gender. **CONCLUSIONS:** Overall, patients had approximately two targeted prescriptions fills over a one-year index period. Rates of prescription fills did not differ by class of medication, patient age, or gender. Assumptions that females or older patients are more compliant with their topical prescription acne regimens were not supported by our findings.

## PSN10

#### THE RISE OF THE GENERIC DRUG MARKET: IMPLICATIONS FOR THE TREATMENT OF SKIN DISEASES

Bhosle M<sup>1</sup>, Balkrishnan R<sup>1</sup>, Feldman S<sup>2</sup>

<sup>1</sup>Ohio State University College of Pharmacy, Columbus, OH, USA;

<sup>2</sup>Wake Forest University School of Medicine, Winston Salem, NC, USA

**OBJECTIVE:** In spite of a significant growth in comparatively inexpensive generic medications, the bioavailability concerns associated with dermatological drugs make the generic substitution practices controversial for skin conditions. The objective of this study was to analyze the trends in branded and generic drugs used in dermatological conditions from 1990–2003. It also analyzed the overall trend in branded and generic drugs in the United States. **METHODS:** A number of summary databases including the National Ambulatory Medical Care Survey (NAMCS), NDC Health Corporation's Pharmaceutical Audit Suite (PHAST) database, and the Food and Drug Administration resources from 1990–2003 were analyzed to obtain and compare information on the manufacturing, production, patents and prescription of branded and generic drugs. These data were examined to